

Date: Thursday, 15/01/2009 11:23:42 AM
 User: Julie Dawson

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services
 Job Number : 44834
 Estimate Number : 13546
 P.O. Number :
 This Issue : 15/01/2009 S.O. No. :
 Prsht Rev. : NC
 First Issue : / / Type : MACHINED PARTS
 Previous Run : 44028
 Written By :
 Checked & Approved By : JUL 09.01.15
 Comment : Est Rev:A New Issue 08-07-31 JLM Verified By:DD

Drawing Name : SEAT RAIL
 Part Number : D38111
 Drawing Number : D3811 REV A
 Project Number : N/A
 Drawing Revision : A
 Material :
 Due Date : 10/02/2009 Qty: 4 Um: Each

Additional Product

Job Number:



Seq. #: Machine Or Operation: Description :

1.0 M6061T6B1500X02500 6061-T6 Bar 1.50 x 2.50



Comment: Qty.: 2.1000 f(s)/Unit Total: 8.4000 f(s)

6061-T6 Bar 2.500x 1.50

Batch: M107387 --

LF 07/01/21

2.0 BAND SAW BAND SAW



Comment: BAND SAW

Cut blank 23.250 " long

LF 07/01/21

3.0 HAAS1 HAAS CNC VERTICAL MACHINING #1



Comment: HAAS CNC VERTICAL MACHINING #1

1- Mill as per Folio FA776Rev: A & Dwg D3811 Rev: A

2-Deburr per dwg D3808

Y.A 09/01/23

4.0 QC2 INSPECT PARTS AS THEY COME OFF MACHINE



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

Y.A 09/01/23

5.0 MILLING CONV. CONVENTIONAL MILLING MACHINE




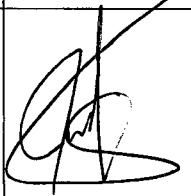


Comment: CONVENTIONAL MILLING MACHINE

1-DRILL REMAINING HOLES

LF 09/01/27

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D3811-1 PAR #: N/A Fault Category: Prod / Machine NCR: Yes No DQA: D Date: 09/02/03
 Resolution: SCRAP Disposition: SCRAP QA: N/C Closed: D Date: 09/02/03

NCR: <u>44834</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
09/01/23	3.0	Machine Foot path error cut out 1 part with a foot made by the rougher at the wrong place.		- Scrap & replace 1 part. - Program was verified, & all is good.	H.A 09/01/23			
		R.C: Machine malfunction.						

NOTE: Date & initial all entries

Date: Thursday, 15/01/2009 11:23:43 AM
User: Julie Dawson

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: SEAT RAIL

Job Number: 44834

Part Number: D38111

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

QC2

INSPECT PARTS AS THEY COME OFF MACHINE



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

SF 09/01/27

7.0

QC8

SECOND CHECK



Comment: SECOND CHECK

JL 09/01/27

8.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

PTO →
(4)
FL 09/01/29

9.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock
Location: 255

9/1/29

(K4)

SD

10.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

09/02/03, 18

Job Completion



MF 09-01-30

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
09-01-29	8.5	QC3 ACID TEST AND ALODINE INSPECT CHEMICAL CONVERSION,	BR	09-01-29	(4)		

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order: 44834
Description: SEAT RAIL		Part Number: D3811-1
Inspection Dwg: D3811 Rev: A		Page 1 of 2

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.40	+/- .030	0.400	✓			
6.70	+/- .030	6.70	✓			
0.700	+/- .010	0.701	✓			
1.400	+/- .010	1.400	✓			
0.990	+/- .010	0.987	✓			
0.281x0.44	+0.006/-0.001	0.284x0.451	✓			
0.780	+/- .010	0.781	✓			
6.48	+/- .030	6.48	✓			
Ø 0.196	+0.005/-0.001	Ø 0.199	✓			
Ø 0.388x100°	+0.006/-0.001	0.388	✓			
R0.13	+/- .030	R0.13	✓			
0.70	+/- .030	0.70	✓			
6.44	+/- .030	6.44	✓			
R1.00	+/- .030	R1.00	✓			
1.576	+/- .010	1.576	✓			
1.76	+/- .030	1.769	✓			
10.00	+/- .030	10.00	✓			
0.590 pitch	+/- .010	0.588 pitch	✓			
0.788 pitch	+/- .010	0.788 pitch	✓			
23.00	+/- .030	23.00	✓			
Ø 0.323	+0.006/-0.001	323	✓			manual mill
0.27	+/- .030	273	✓			manual mill
1.08	+/- .030	1.082	✓			manual mill

Measured by: H.A. / [Signature]	Audited by: J.L.	Prototype Approval:	N/A
Date: 09/01/23	Date: 09/01/29	Date:	N/A

Rev	Date	Change	Revised by	Approved
A		New Issue	KJ/JLM	

DART AEROSPACE LTD		Work Order: 44834
Description: SEAT RAIL		Part Number: D3811-1
Inspection Dwg: D3811	Rev: A	Page 2 of 2

FIRST ARTICLE INSPECTION CHECKLIST

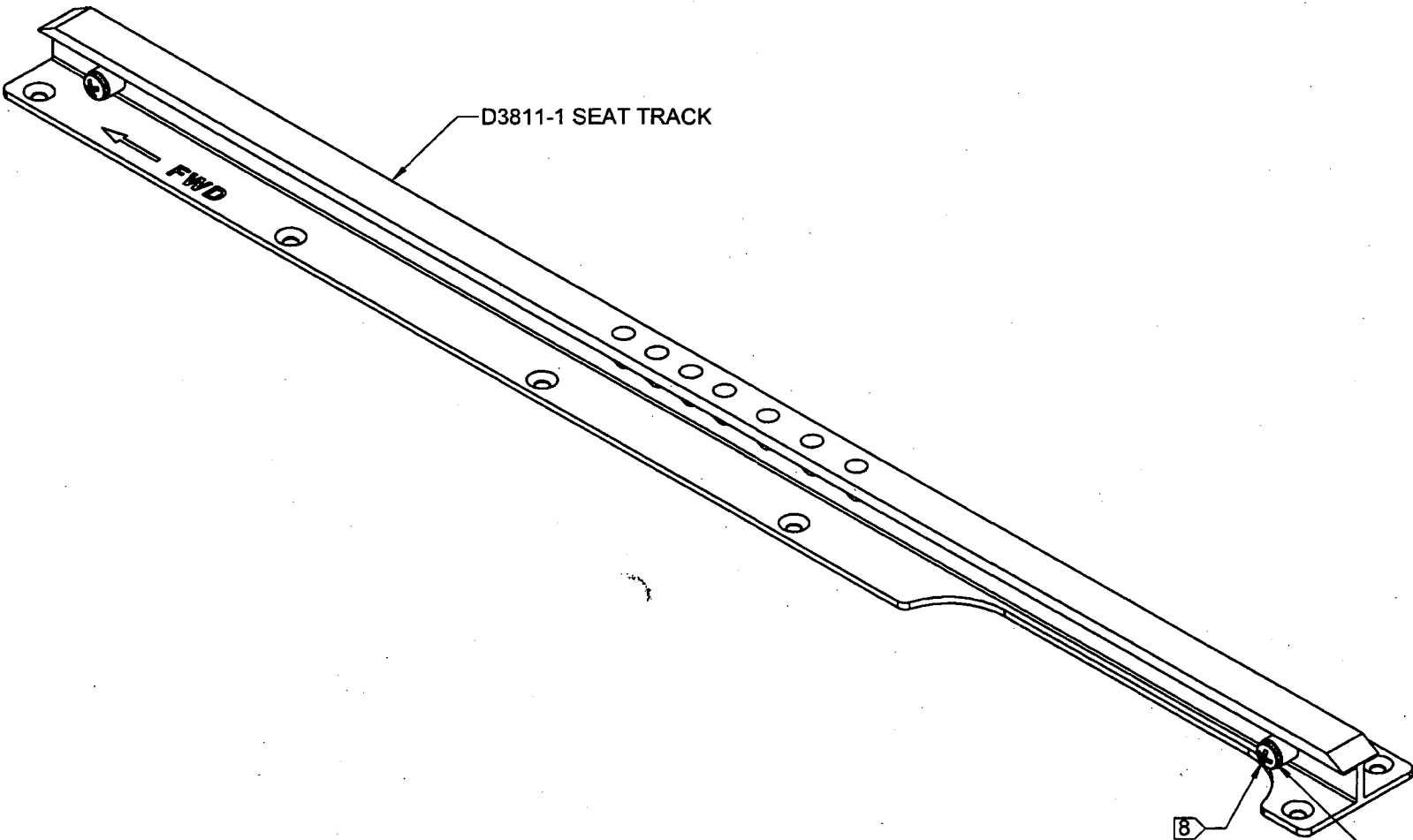
☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
20.68	+/- .030	20.68	✓			manual mill
0.44	+/- .030	0.451	✓			
1.24	+/- .030	1.244	✓			manual mill
0.286 x 60°	+/- .010	0.290 x 60°	✓			
Ø 0.388 x 100°	+ .006 / - .001	0.388 x 100°	✓			
R 0.032	+/- .030	R 0.032	✓			
0.132	+/- .010	0.133	✓			
0.315	+/- .010	0.315	✓			
0.015 x 30°	+/- .010	0.017 x 30°	✓			
0.100	+ .030 / - .010	0.107	✓			
1.98	+/- .030	1.980	✓			
0.120	+/- .010	0.121	✓			
0.730	+/- .010	0.731	✓			
0.195	+/- .010	0.198	✓			
0.630	+/- .010	0.630	✓			

Measured by: H.A./SF	Audited by: JL	Prototype Approval: N/A
Date: 09/01/23/27	Date: 09/01/29	Date: N/A

Rev	Date	Change	Revised by	Approved
A		New Issue	KJ/JLM	

QTY -041	P/N	DESCRIPTION
X	D3811-041	SEAT TRACK ASSEMBLY
1	D3811-1	SEAT TRACK
4	D3811-3	BUSHING
2	MS21042L3	NUT
2	MS27039-1-15	SCREW



D3811-041 SEAT TRACK ASSEMBLY

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WITHOUT NOTICE
WORK ORDER
NO. 42834

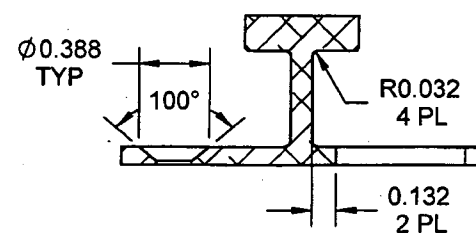
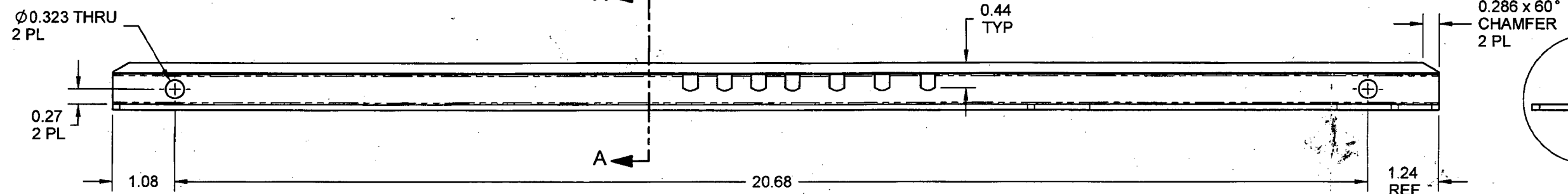
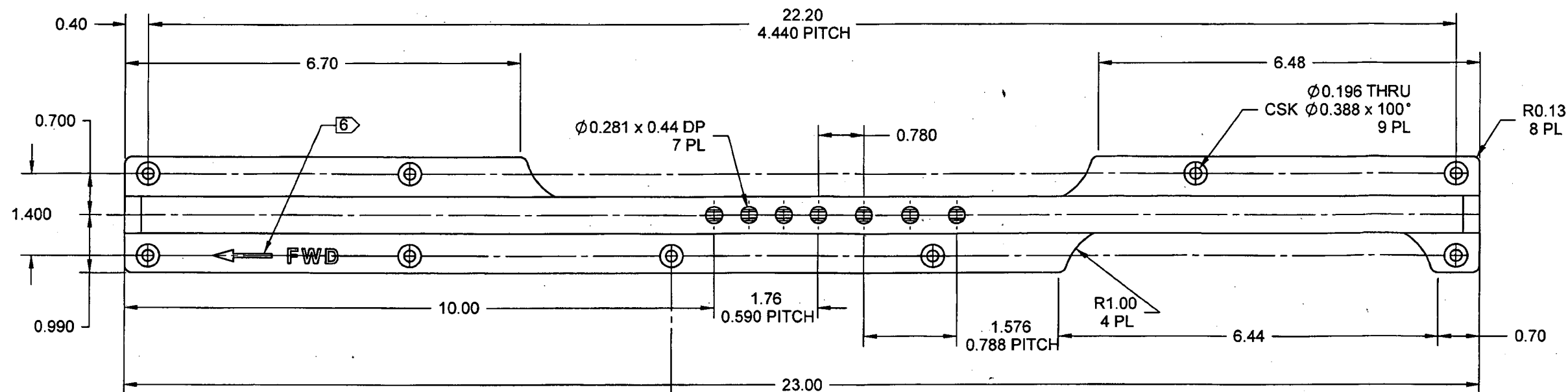
MS27039-1-15 SCREW (1)
MS21042L3 NUT (1)
D3811-3 BUSHING (2)
2 PL

RELEASED
08-09-30/11

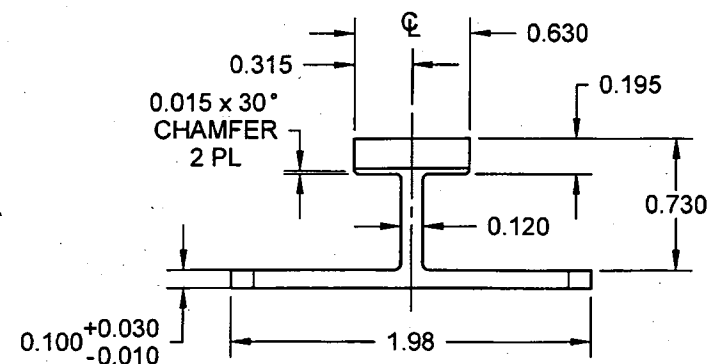
- NOTES:
- 1) MATERIAL: N/A
 - 2) FINISH: N/A
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: IDENTIFY WITH DART ASSEMBLY P/N D3811-041 & B/N USING FINE POINT PERMANENT INK MARKER
 - 7) WEIGHT: 0.76 lbs
 - 8) TORQUE FASTENERS TO 20-25 in-lbs

A	NEW ISSUE	RF	08.08.18
REV.	DESCRIPTION	BY	DATE
DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		D3811	SHEET 1 OF 3
APPROVED		TITLE	SCALE
DE APPR.		SEAT TRACK ASSEMBLY	NTS
DATE	08.08.18	COPYRIGHT © 2008 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

8 7 6 5 4 3 2 1



SECTION A-A



DETAIL B

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06-29-30

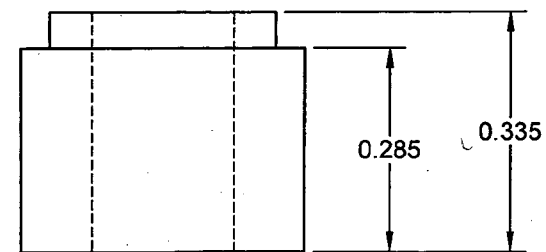
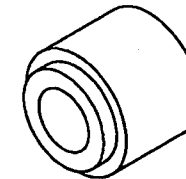
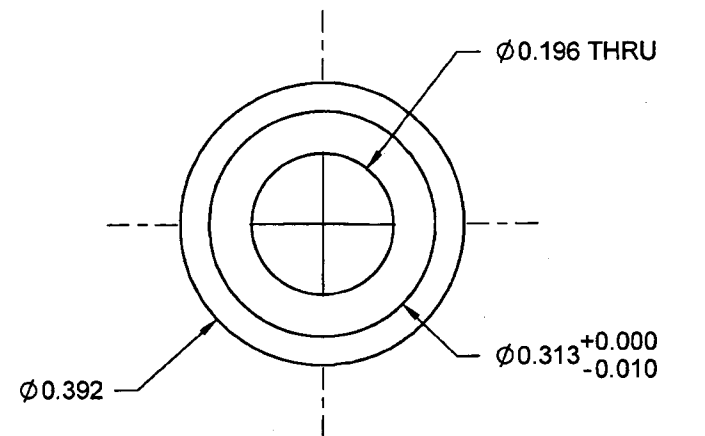
D3811-1 SEAT TRACK

NOTES:

- 1) MATERIAL: 6061-T6 (OR T651/T6510/T6511/T62) ALUMINUM BAR PER AMS-QQ-A-200/8 (OR AMS 4160) OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116) (REF. DART SPEC. M6061T6B)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: ENGRAVE ARROW & FWD AS SHOWN USING 0.25 HIGH LETTERS TO MAX DEPTH OF 0.005
- 7) WEIGHT: 0.724 lbs

DESIGN	RF	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		D3811	SHEET 2 OF 3
APPROVED		TITLE	SCALE
DE APPR.		SEAT TRACK ASSEMBLY	NTS
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8 7 6 5 4 3 2 1



D3811-3 BUSHING

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WORK ORDER
NO. 44834

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08-09-30/11

NOTES:

- 1) MATERIAL: 6061-T6 (OR T651/T6510/T6511/T62) ALUMINUM ROUND BAR PER AMS-QQ-A-200/8 (OR AMS 4160) OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116) (DART REF. SPEC. M6061T6R)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.003 lbs

DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		D3811	SHEET 3 OF 3
APPROVED		TITLE	SCALE
DE APPR.		SEAT TRACK ASSEMBLY	NTS
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